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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,715	05/24/2000	CHRISTOPHER BEVAN	REF/BEVAN/711	2485

7590 08/14/2003

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EXAMINER
GAKH, YELENA G

ART UNIT	PAPER NUMBER
1743	13

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/486,715	BEVAN ET AL.	
	Examiner	Art Unit	
	Yelena G. Gakh, Ph.D.	1743	

-- The MAILING DATE of this communication appears on th cover she t with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-12 and 15-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-12 and 15-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. The Amendment, filed on 07/30/03, is acknowledged. Claims 1-5 and 13-14 are cancelled without prejudice. Claims 6-12 and 15-29 are pending in the application.

Response to Amendment

2. The rejection under 35 U.S.C. 112, second paragraph is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 6-9, 12, 15 and 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Surjaatmadja (US 5,192,509) in view of Pressley et al. (US 3,732,164).

Surjaatmadja discloses an apparatus for automatic titration, comprising: at least two input ports in fluid communication with a common channel, a detection zone having an input in fluid communication with the common channel and the output, a color detector for detecting the color of the fluid (e.g. any spectrophotometer, including ultraviolet, visible range spectrophotometer, etc. as indicated in col. 1), and control means connected to continuous flow type metering pumps to vary the composition of the fluid continuously and linearly (Figure and col. 2, lines 50-60). The control means are "preferably syringe-type pump that operate under control of a stepping motor" (col. 2, lines 58-62). "The automatic titration system 10 is capable of operation in a selected one of two modes, a batch processing mode and a continuous mode. The batch processing mode enables the sampling of a multiple of fluids which may then be subject to reaction to identify the types of fluids".

Surjaatmadja does not specifically disclose a multi-wavelength spectrophotometer, which can produce data at more than one wavelength, a scanning ultraviolet or visible range spectrophotometer in particular.

Pressley discloses a titration system used for "nitrogen removal from waste water by breakpoint chlorination" utilizing spectrophotometric scanning over a spectral range of 200-500 μ for determining other end-products besides the ones expected during titration reactions.

It would have been obvious for anyone of ordinary skill in the art to modify Surjaatmadja's apparatus by using scanning spectrophotometer with multi-wavelength capabilities disclosed by Pressley, because this expands the area of applying the apparatus for detecting all possible products besides those that are expected from titration reactions, as indicated by Pressley.

Claims 12 and 20-22 recite a "use" limitation. This does not bear any patentable weight. Apparatus claims must be structurally distinguishable from the prior art in terms of structure not function. ***In re Danley***, 120 USPQ 528, 531 (CCPA 1959); Hewlett-Packard Co. V. Baush and Lomb, Inc., 15 USPQ2nd 1525, 1528 (Fed. Cir. 1990).

7. **Claims 10-11, 16 and 23-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Surjaatmadja in view of Pressley, as applied to claims 6-9 and 15, and further in view of Garrison et al. (US 4,810,331).

Surjaatmadja in view of Pressley do not specifically disclose autosampler in his apparatus.

Garrison discloses "surfactant sensing electrode for potentiometric titrations" and indicates, "it should be appreciated that potentiometric quantitation of surfactant samples using a coated-wire membrane electrode as described above can be automated by employing an autosampler in conjunction with a potentiometric titration instrument. In some cases, such potentiometric titrations may take as little as two minutes per sample, compared with thirty minutes per sample when using manual two-phase titration methods or chromatographic procedures" (col. 16, lines 30-39).

It would have been obvious for anyone of ordinary skill in the art to use autosampler in Surjaatmadja-Pressley's apparatus, as disclosed by Garrison, because Garrison specifically indicates advantages of automating the operation of the disclosed analytical device by employing such autosampler.

Claims 23-29 recite a "use" limitation. This does not bear any patentable weight: apparatus claims must be structurally distinguishable from the prior art in terms of structure not function. ***In re Danley***, 120 USPQ 528, 531 (CCPA 1959); Hewlett-Packard Co. V. Baush and Lomb, Inc., 15 USPQ2nd 1525, 1528 (Fed. Cir. 1990).

Response to Arguments

8. Applicant's arguments filed 07/30/03 have been fully considered. The rejections under 35 U.S.C. 112, second paragraph are withdrawn in view of the Applicants' remarks. The arguments with respect to prior art are moot in view of the new grounds of rejection.

The examiner would like to emphasize once more that a function of an apparatus is not considered to be a patentable limitation for the invention drawn to the apparatus.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (703) 306-5906. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

YG

August 5, 2003

Jill Warden
Supervisory Patent Examiner
Technology Center 1700